

REMARKS

The Office Action dated June 9, 2006, has been received and carefully noted. The above amendments to the specification, claims 1-6, 9, 12, 13, 15-22, 26-29, 31-33, 36, 39-41, and 45-51 and new claims 52-55, and the following remarks, are submitted as a full and complete response thereto. The amendments to the claims are to improve clarity and antecedent support of the features recited therein. New claims 52-55 correspond to the features recited in claims 1, 20, 41, and 45, respectively, including means-plus-function recitations. No new matter is being presented, and approval and entry are respectfully requested. As will be discussed below, it is also requested that all of claims 1-55 be found allowable as reciting patentable subject matter.

Claims 1-55 stand rejected and pending and under consideration.

OBJECTIONS TO THE SPECIFICATION:

On page 3 of the Office Action, the specification was objected to because it contains an embedded hyperlink and/or other form of browser-executable code. The specification has been amended to correct such minor informality. Accordingly, it is respectfully requested that the objection to the claim be withdrawn.

OBJECTIONS TO THE CLAIMS:

In the Office Action, at page 3, claim 3 was objected to for a minor typographical error. Claim 3 has been amended to correct such minor typographical error. Accordingly, it is respectfully requested that the objection to the claim be withdrawn.

REJECTION UNDER 35 U.S.C. § 101:

In the Office Action, at page 2, claims 50 and 51 were rejected under 35 U.S.C. § 101 because the invention is directed to non-statutory subject matter.

Specifically, the Office Action maintains that independent claims 50 and 51 are drawn to a “computer program” per se as recited in the preamble and as such are non-statutory subject matter. This rejection is traversed and reconsideration is requested.

Applicants respectfully assert that the preambles of independent claims 50 and 51 have not been properly considered. The preamble of independent claims 50 and 51 clearly recite, “A **computer program embodied on a computer readable medium**, said computer program controlling one of a server device and a gateway device to perform.” Emphasis added. The Office Action should have referred to MPEP 2106 (IV)(B)(1)(a). This portion of the MPEP clearly sets forth that “Data structures **not claimed as embodied** in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer.” Emphasis added. This portion of the MPEP proceeds to clarify that “in contrast, a claimed computer-readable medium encoded with a data structure defines structural and

functional interrelationships between the data structure and **the computer software and hardware components** which permit the data structure's functionality to be realized, and is thus statutory." Emphasis added. Thus, MPEP 2106 (IV)(B)(1)(a) provides that **"a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer with permit the computer program's functionality to be realized, and is thus statutory."**

If view of MPEP 2106, a computer program embodied on a computer readable medium as recited in the preambles of independent claims 50 and 51 define structural and functional interrelationships between the computer program and the rest of the computer with permit the computer program's functionality to be realized. Thus, contrary to the contentions made in the Office Action, independent claims 50 and 51 are directed to statutory subject matter.

Accordingly, in view of the foregoing, it is respectfully requested that the rejection to independent claims 50 and 51 be withdrawn.

REJECTION UNDER 35 U.S.C. § 102:

In the Office Action, at page 4, claims 1-6, 10, 15-16, 19, 20, 22-26, 28-29, 31, 35-36, 38, 41, 44-46, 48-49 and 50-51 were rejected under 35 U.S.C. § 102 as being anticipated by Fishman et al. ("Fishman"). The rejection is traversed and reconsideration is requested.

Independent claim 1, upon which claims 2-19 are dependent, recites a cellular receiver device including a cellular receiver configured to enable receipt of data from a cellular network domain. The cellular receiver device also includes a radio broadcast access unit configured to provide conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel.

Independent claim 20, upon which claims 21-40 are dependent, recites a server device including a gateway configured to receive data from an external data source and to map a destination address of received data to a mobile subscriber identity. The server device also includes an adder configured to add said mobile subscriber identity to said received data, and to put said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast channel to provide data service to a mobile device.

Independent claim 41 recites a gateway device configured to provide a connection between a cellular network and a digital radio broadcast domain, configured to encrypt data received from said cellular network to be forwarded to a mobile device, and configured to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme.

Independent claim 45 recites a system, including a cellular receiver device configured to receive data from a data source, said cellular receiving device including a cellular receiver configured to enable receipt of said data from a cellular network domain, and a radio broadcast access unit configured to provide conditional access to a digital

radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel. A server device is configured to provide a data service to a mobile device, said server device including a gateway configured to receive data from an external data source and for mapping a destination address of received data to a mobile subscriber identity, and an adder configured to add said mobile subscriber identity to said received data, and to put said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast channel. A gateway device is configured to provide a connection between a cellular network and a digital radio broadcast domain, said gateway device being configured to encrypt data received from said cellular network to be forwarded to said mobile device, and to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme.

Independent claim 46 recites a method, including encrypting data to be forwarded, and forwarding said data to a digital radio broadcast domain based on a conditional access scheme to transmit said data to a mobile device.

Independent claim 48 recites a method, including providing a conditional access to a digital radio broadcast data channel to enable receipt of said data at a mobile device via said digital radio broadcast data channel, and receiving said data.

Independent claim 50 recites a computer program embodied on a computer readable medium, said computer program including encrypting data to be forwarded, and forwarding said data to a digital radio broadcast domain based upon a conditional access scheme to control one of a server device and a gateway device.

Independent claim 51 recites a computer program embodied on a computer readable medium, said computer program including providing a conditional access to a digital radio broadcast data channel to enable receipt of said data at a mobile device via said digital radio broadcast data channel, and receiving said data.

Independent claim 52 recites a cellular receiver device including cellular receiving means for enabling receipt of data from a cellular network domain, and radio broadcast access means for providing conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel.

Independent claim 53 recites a server device including gateway means for receiving data from an external data source and for mapping a destination address of received data to a mobile subscriber identity, and adding means for adding said mobile subscriber identity to said received data, and for putting said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast channel to provide data service to a mobile device.

Independent claim 54 recites a gateway device for providing a connection between a cellular network and a digital radio broadcast domain, for encrypting data received from said cellular network to be forwarded to a mobile device, and for forwarding said encrypted data to said digital radio broadcast domain based on a conditional access scheme.

Independent claim 55 recites a system including cellular receiver means for receiving data from a data source, said cellular receiving means comprising cellular

receiving means for enabling receipt of said data from a cellular network domain, and radio broadcast access means for providing conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel. The system includes server means for providing a data service to a mobile device, said server means comprising gateway means for receiving data from an external data source and for mapping a destination address of received data to a mobile subscriber identity, and adding means for adding said mobile subscriber identity to said received data, and for putting said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast channel. The system includes gateway means for providing a connection between a cellular network and a digital radio broadcast domain, said gateway means being configured to encrypt data received from said cellular network to be forwarded to said mobile device, and to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme.

As will be discussed below, Fishman fails to disclose or suggest the elements of any of the presently pending claims.

Fishman generally describes a customizing of content based on one or more operating characteristics of a mobile client by use of a mobile gateway, wherein a content refers to electronic content like email, Web pages, financial data, sports information, etc. See Abstract. The mobile gateway as disclosed in Fishman includes content transforms based on the individual operating characteristics of the various mobile clients that are supported. Upon receiving content for a mobile client, said mobile gateway identifies the

appropriate transform, transforms the content, and sends the transformed content to the mobile client. See paragraphs [0011]-[0015] of Fishman.

The present invention, in turn, relates to method and system for providing data services to mobile device via a digital radio broadcast channel, wherein data is encrypted and forwarded to a digital radio broadcast domain based on a conditional access scheme. One of the many embodiments of the present invention is to provide an improved data transmission scheme in an environment where the routing of data is performed by a broadcast routing scheme.

For instance, in the detailed description of the present application, paragraph 25, two specific examples of "digital radio broadcast channels "are given, namely a channel of a Digital Radio Mondial (DRM) system or a Digital Audio Broadcast (DAB) system.

In contrast, FIG. 2 of Fishman and paragraphs [0011]-[0015], [0024] and [0035-0037] referred to in the Office Action do not teach or suggest, "conditional access to a digital radio broadcast data channel," as recited in independent claim 1, "to put said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast," as recited in independent claim 20, "configured to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme," and "conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel," as recited in independent claim 45. In fact, the device described in Fishman is serviced by telecom operators which use different radio spectrum than digital radio broadcast channels. In

particular, as Fishman deals with a customizing of content based on the device that will receive the content (See paragraph [0010] of Fishman), no specific routing schemes (none of the following: anycast, broadcast, multicast, unicast) are considered in Fishman and, thus, no specific conditions, transmission ways or channels, respectively, access means or routing scheme domains depending on a specific routing scheme are regarded in Fishman.

In paragraphs [0035-0037] of Fishman referred to in the Office Action, simply describe a mobile gateway 250 including mobile client data 252 for associating the appropriate transforms with each mobile client, and the nature of the transforms depending on the operating characteristics of the corresponding mobile clients. However, such transforms are done through telecom operators which use different radio spectrum than digital radio broadcast channels. In Fishman, there is no teaching or suggestion regarding specific conditions, transmission ways or channels or routing scheme domains depending on a specific routing scheme are regarded in Fishman access to “a digital radio broadcast data channel,” as recited in the present claims.

The present invention as claimed relates to an improvement of data transmission based on a specific routing scheme - the broadcast routing scheme. Accordingly, corresponding functionalities and components related to broadcasting are used in the subject matter claimed by the present invention.

Thus, for example, considering the recitations of independent claim 1, the cellular receiver device claimed there comprises a radio broadcast access unit, whereas in

Fishman no such unit or means allowing the access via broadcast is provided. Further, a conditional access to a digital radio broadcast data channel is provided by said radio broadcast access unit, whereas in Fishman there is no teaching or suggestion providing a broadcast data channel as such, not to mention a specific conditional access to a broadcast data channel.

In Fishman no “conditional access” to a channel is disclosed at all as recited in independent claims 1, 41, 45, 46, 48, 50-52, 54, and 55. In the passage provided in the present Office Action, a list of recipients which is received by a gateway and according to which the content is forwarded to corresponding mobile clients is interpreted as a conditional access. However, this fact not only indicates that no conditional access to a channel is performed according to Fishman but also underlines that no broadcast at all is used or required in Fishman.

Because independent claims 46, 48, and 50-55 include similar claim features as those recited in independent claims 1, 20, 41, and 45, although of different scope, and because the Office Action refers to similar portions of the cited references to reject independent claims 1, 20, 41, and 45, the arguments presented above supporting the patentability of independent claims 1, 20, 41, and 45 are incorporated herein to support the patentability of independent claims 46, 48, and 50-55.

Thus, Fishman and the present invention deal with entirely different scopes and methodologies. Consequently, the present invention relates to an entirely different

technical problem and solution and is not at least slightly eluded in the invention described and claimed in Fishman.

For the reasons set forth above, it is respectfully requested that independent claims 1, 20, 41, 45, 46, 48, and 50-55 and related dependent claims be allowed.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at page 13-14, claims 7-9, 11-14, 17-18, 21, 23, 27, 30, 32-34, 37, and 39-40 were rejected under 35 U.S.C. § 103 as being unpatentable over Fishman in view of EP 1067741 A1 to Mulham ("Mulham"). The Office Action took the position that Fishman discloses wherein decryption of said received messages and Mulham teaches wherein decryption of said received message is based on latest valid security parameters allocated to said mobile subscriber identity. The rejection is traversed and reconsideration is requested.

As will be discussed below, Fishman and Mulham fail to disclose or suggest the elements of any of the presently pending claims.

Dependent claims 7-9, 11-14, and 17-18 depend from independent claim 1 and dependent claims 21, 23, 27, 30, 32-34, 37, and 39-40 depend from independent claim 20. Because the combination of Fishman and Mulham must teach, individually or combined, all the recitations of the base claim and any intervening claims of dependent claims 7-9, 11-14, 17-18, 21, 23, 27, 30, 32-34, 37, and 39-40, the arguments presented

above supporting the patentability of independent claims 1 and 20 over Fishman are incorporated herein.

Mulham generally describes a method of notifying a user of receipt of an e-mail by a mail centre. In Mulham, the method transmits a notification message in a broadcast signal. A notification message is transmitted in Mulham and it is indicated the receipt of the e-mail by the mail centre. See Abstract. Mulham specifically indicates that the invention thereof is particularly suitable for use with a television broadcast system, and the broadcast signal may comprise a television signal. See paragraph [0020]. According to Mulham, the television broadcast system includes for example any satellite, terrestrial, cable or other system. However, similarly to Fishman, Mulham does not consider the embodiment recited in independent claims 1 and 20. Thus, Fishman and Mulham would fail to teach or suggest providing, “conditional access to a digital radio broadcast data channel to enable receipt of said data via said digital radio broadcast data channel,” as recited in independent claim 1 and putting “said received data with said mobile subscriber identity to a data stream to be broadcast via a digital radio broadcast channel to provide data service to a mobile device,” as recited in independent claim 20. The combination of Fishman and Mulham would be devoid of the conditional access to the digital radio broadcast data channel and broadcasting via the digital radio broadcast channel to provide data service to a mobile device as in the present application.

Accordingly, in view of the foregoing, it is respectfully requested that independent claims 1 and 20 and related dependent claims 7-9, 11-14, 17-18, 21, 23, 27, 30, 32-34, 37, and 39-40 be allowed.

In the Office Action, at page 13-14, claims 42-43 and 47 were rejected under 35 U.S.C. § 103 as being unpatentable over Fishman in view of EP 0804012 A2 to Risto ("Risto"). The Office Action took the position that Fishman and Risto describe the recitations of claims 42-43 and 47. The rejection is traversed and reconsideration is requested.

As will be discussed below, Fishman and Risto fail to disclose or suggest the elements of any of the presently pending claims.

Dependent claims 42-43 depend from independent claim 41 and dependent claim 47 depends from independent claim 46. Because the combination of Fishman and Risto must teach, individually or combined, all the recitations of the base claim and any intervening claims of dependent claims 42-43 and 47, the arguments presented above supporting the patentability of independent claims 41 and 46 over Fishman are incorporated herein.

Risto generally describes a method and equipment in which a terminal of a bidirectional communication network and a terminal or computer equipment of a high capacity unidirectional transmission network are combined. See column 2, lines 53-58. The combined characteristics are used in a manner that is dynamically changing in

accordance with operating conditions and requirements. The communications network 11 comprises at least an element 12 producing audiovisual transmission in the MPEG (Motion Pictures Experts Group) format and broadcast transmissions in a DAB (Digital Audio Broadcasting). See columns 5-6 of Risto.

However, similarly to Fishman, Risto is devoid of any teaching or suggestion providing, “configured to forward said encrypted data to said digital radio broadcast domain based on a conditional access scheme,” as recited in independent claim 41, and “forwarding said data to a digital radio broadcast domain based on a conditional access scheme to transmit said data to a mobile device,” as recited in independent claim 46. A combination of Fishman and Risto would be silent as to forwarding data as particularly recited in independent claims 41 and 46. A combination of Fishman and Risto would simply provide a device serviced by telecom operators, which use different radio spectrum than digital radio broadcast channels, and an agent to control dynamic reception and storage of multimedia information and to deliver information related to the use of the multimedia information to a telecommunications system. The combination of Fishman and Risto would not provide the forwarding of the data to the digital radio broadcast domain and that the forwarding of the data is based on a conditional access scheme as in the present application.

Accordingly, in view of the foregoing, it is respectfully requested that independent claims 41 and 46 and related dependent claims 42-43 and 47 be allowed.

CONCLUSION:


In view of the above, Applicant respectfully submits that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicant further submits that the subject matter is more than sufficient to render the claimed invention unobvious to a person of skill in the art. Applicant therefore respectfully requests that each of claims 1-55 be found allowable and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicant respectfully petitions for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


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Enclosures: Additional Claim Fee Transmittal
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